



ABOVE • You'd smile too if your commute was as healthy as hers; see story on p. 5.

features

NIH To Lead President's Proposed BRAIN Initiative

1

CC's Alter Wins Gairdner Award

3

NCI Scientist Has Unique Commute

5

Winners Named in Safety Photo Contest

15

Accommodations for Low Vision Are Focus of Program

16

departments

Briefs 2

Volunteers 7

Milestones 10

Digest 14

Feedback 15

nih record

President, Collins Announce BRAIN Initiative

On Apr. 2, in the East Room of the White House, President Obama announced the administration's BRAIN (Brain Research through Advancing Innovative Neurotechnologies) Initiative. The President was introduced by NIH director Dr. Francis Collins, who in the days following the announcement embarked on a media outreach tour to sketch out the particulars of a plan he called roughly reminiscent of the Human Genome Project, circa 1988.

NIH would lead an effort, slated to begin in FY 2014, budgeted in its first year at \$100 million. In concert with research teams from the Defense Advanced Research Projects Agency and the National Science Foundation, NIH would spearhead an initiative to accelerate the development and application of new technologies that will enable researchers to produce dynamic pictures of the brain

SEE BRAIN INITIATIVE, PAGE 6

President Barack Obama (r) is introduced by NIH director Dr. Francis Collins at the BRAIN Initiative event at the White House on Apr. 2.

PHOTO: CHUCK KENNEDY



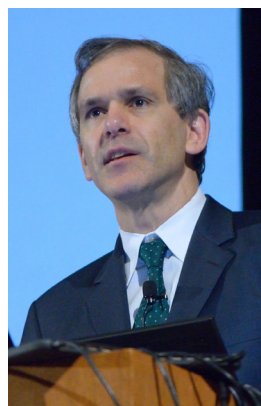
A Plea for Collaboration Murray Presents Global Burden of Disease Study 2010

By Belle Waring

That sound you hear is the mind stretching to grasp a report on a heroic scale: the Global Burden of Disease Study 2010. A collaboration of 486 authors, 302 institutions and 50 countries, GBD 2010 is the largest single study ever published by *The Lancet*.

It turns out that the largest systematic scientific effort in history to quantify the world's health challenges is about you.

It includes you. If you—or someone you love, work with, play basketball with—has ever sus-

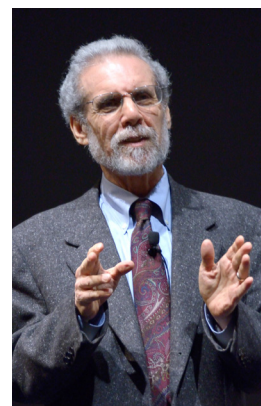


Dr. Chris Murray

'Leaders are Senders' Goleman Brings NIH's 'Back to the Breath'

By Dever Powell

Dr. Daniel Goleman, best-selling author of *Emotional Intelligence*, recently opened a talk



Dr. Daniel Goleman

at NIH by asking a rapt audience in Masur Auditorium to describe the best boss they ever had.

Audience members fired back one-by-one: Inspirational. Ethical. Flexible. Good listener. Has your back. Mission-centered. Trustworthy. Sincere. Intuitive.

"Good," Goleman said.

"Now describe the leader from hell."

Someone called out: "Negate everything we just said!"

SEE GLOBAL BURDEN, PAGE 4

SEE GOLEMAN, PAGE 8



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NIH...Turning Discovery Into Health

briefs

STEP Forum on Coexisting Diseases, May 9

The staff training in extramural programs (STEP) committee will present a Current Controversies in Medicine forum on the topic "Coexisting Diseases: How To Live with a Triple Whammy," on Thursday, May 9, from 9 a.m. to noon in Lister Hill Auditorium, Bldg. 38A.

We are now living longer, but often with multiple chronic co-morbidities that confound effective diagnosis and treatment. The challenge is to develop optimal therapeutic approaches to help the patient as a whole, rather than managing individual diseases. Learn about recent efforts in prevention, diagnosis and management of co-existing medical conditions that are changing the way doctors think about and treat their patients.

Bike to Work Day, May 17

Celebrate National Bike Month and Bike to Work Day with the NIH Bicycle Commuter Club, Friday, May 17, from 7 to 9:30 a.m. on the Paul Rogers Plaza in front of Bldg. 1 and off-campus at Rockledge and Rockville, near the new NCI Shady Grove building. The off-campus pit stops run from 6:30 to 8:30 a.m.

At the Bldg. 1 stop, those who show up riding a bicycle and wearing a helmet may enjoy snacks and participate in a raffle including such prizes as cycling gear and equipment and Fitness Center memberships. All pre-registrants get a free Bike to Work Day T-shirt.

Bike to Work Day takes place rain or shine. If you would like to volunteer to help at the event, email Jonathan Mazal (mazaljr@mail.nih.gov).

NIH 2013 National Day of Prayer, May 2

This year's NIH National Day of Prayer will be held Thursday, May 2 from 11:30 a.m. to 1 p.m. in front of Bldg. 1. Join fellow NIH'ers, patients and friends in celebration of a day Congress has set aside for our country. Federal and military compounds all over the U.S. will observe the National Day of Prayer on this day with guest speakers, music and prayer. All are welcome.

OITE Hosts Career Symposium, May 14

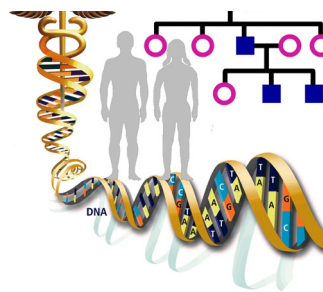
The NIH Office of Intramural Training & Education invites all NIH graduate students and postdoctoral trainees, both basic scientists and clinicians, to participate in the 6th NIH Career Symposium on Tuesday, May 14 at Natcher Conference Center from 8:30 a.m. to 5 p.m. Attendees can learn about scientific career options and explore factors that lead to career success. The keynote speaker will be Dr. Alan

Leshner, chief executive officer of the American Association for the Advancement of Science. For details visit www.training.nih.gov.

'Genetics Home Reference' Celebrates 10 Years

George W. Bush was President, gas cost \$1.59 a gallon and the Human Genome Project, coincidentally, had officially ended on Apr. 25, 2003, the date that NLM launched Genetics Home Reference (GHR), a free online resource about human genetics created for patients, families and the public (<http://ghr.nlm.nih.gov/>). The web site provides a bridge between the public's questions about human genetics and the rich technical data that has emerged from the Human Genome Project and other genomic research.

GHR provides consumer-friendly summaries of genetic conditions and their associated genes,



gene families and chromosomes. The site also features a primer called "Help Me Understand Genetics," an illustrated introduction to fundamental topics in human genetics including muta-

tions, inheritance, genetic testing, gene therapy and genomic research. Additionally, GHR offers helpful background information, including a glossary of genetic and medical terms and links to numerous other quality resources. A "Spotlight" feature on the GHR home page highlights important observances and discoveries in the field of human genetics and draws attention to useful learning tools and clinical resources.

When it was launched a decade ago, Genetics Home Reference featured 19 condition summaries and 16 gene descriptions. Today, GHR offers easy-to-read summaries of about 850 genetic conditions, more than 1,060 genes, more than 80 gene families, all of the human chromosomes and mitochondrial DNA. New summaries are added regularly. GHR currently receives about 43,000 visitors per day and 39 million hits per month, suggesting that it continues to be an important and useful health resource.

Next Protocol Navigation Lecture, May 6

The IRP Protocol Navigation Training Program Seminar Series continues with a lecture on Monday, May 6 from 1 to 2 p.m. in Bldg. 50, Conf. Rm. 1227/1328. The program is a trans-NIH effort to develop resources and tools and to provide training for intramural staff and contractors involved in protocol development, writing, coordination and management. Katherine Cooper-Arnold and Donna Jones from NHLBI's Office of Clinical Research will present "ClinicalTrials.gov Record Transfer: The NHLBI Experience." For more information, contact Beverly Barham, (301) 594-2494, bbarham@mail.nih.gov or Marcia Vital, (301) 451-9437, vitalm@mail.nih.gov.

nih record

Mayo Clinic's Petersen To Give Butler Lecture, May 8

Dr. Ronald C. Petersen of the Mayo Clinic is a leading expert in the early detection of subtle brain changes that signal the onset of Alzheimer's disease. His goal: to identify the biomarkers and imaging tools that may one day lead to therapies to prevent or treat the neurodegenerative disease that currently affects as many as 5 million Americans. His talk, "Neuroimaging and Biomarkers: How Early Can We Diagnose Alzheimer's?" will be delivered at the memorial lecture in honor of NIA founding director Dr. Robert N. Butler on Wednesday, May 8 at 3 p.m. at Masur Auditorium, Bldg. 10.



Dr. Ronald C. Petersen

PHOTO: MAYO CLINIC

"We know that Alzheimer's-related brain changes may occur 10 to 15 years before symptoms appear," said Petersen, director of the Mayo Alzheimer's Disease Research Center and the Mayo Study of Aging in Rochester, Minn. "To have an impact on this devastating disorder, we must be able to detect Alzheimer's in pre-symptomatic people."

Petersen is deeply involved in two major studies under way in this regard: the Mayo Study of Aging and the Alzheimer's Disease Neuroimaging Initiative, both supported significantly by NIH. Petersen's lecture will focus on the latest data and insights from the Mayo Study, which follows a random sample of some 3,000 older volunteers, using imaging and fluid biomarkers to track whether they transition from normal cognition to mild cognitive impairment to dementia over the years.

Petersen is a member of NIA's National Advisory Council on Aging and chairs the Advisory Council on Research, Care and Services for the National Alzheimer's Project Act. He received a Ph.D. degree in experimental psychology from the University of Minnesota and served as a research psychologist at the U.S. Army Biomedical Research Laboratory. He graduated from Mayo Medical School and interned in medicine at Stanford University Medical Center. He returned to Mayo Clinic to complete a residency in neurology, which was followed by a fellow-

ship in behavioral neurology at Harvard University Medical School/Beth Israel Hospital in Boston.

The lecture honors Butler, renowned gerontologist, psychiatrist and author of the Pulitzer Prize-winning book *Why Survive? Being Old in America*. He championed aging and Alzheimer's research as the first NIA director from 1976 to 1982. Butler died July 4, 2010.—Peggy Vaughn

Clinical Center's Alter To Receive Gairdner Award

Dr. Harvey Alter, chief of clinical studies and associate director of research in the department of transfusion medicine at the Clinical Center, has been selected to receive the 2013 Canada Gairdner International Award on Oct. 24 in Toronto.

He shares the award with Dr. Daniel Bradley, consultant at the Centers for Disease Control and Prevention, and Dr. Michael Houghton, researcher and professor at the University of Alberta, Edmonton, Canada, for their contributions to the discovery and isolation of the hepatitis C virus, which has led to development of new diagnostic and therapeutic agents.



Dr. Harvey Alter

"Dr. Alter's career-long achievements in blood safety have done much to advance the cause of human health," said NIH director Dr. Francis Collins. "We at NIH are thrilled that he is being recognized with this prestigious international honor."

Thirty years ago, about a third of transfused people received tainted blood, which later inflamed their livers, producing hepatitis (also called viral hepatitis), the leading cause of cirrhosis and liver cancer and the most common reason for liver transplantation. Alter was the principal investigator on studies that identified non-A, non-B hepatitis, now called hepatitis C. His work was instrumental in providing the scientific basis for instituting blood donor screening programs that have decreased the incidence of transfusion-transmitted hepatitis to near zero.

"Dr. Alter's research achievements in hepatitis have been transformative for public health practice in the U.S. and abroad," said CC director Dr. John Gallin. "We are proud of his prominence in the field of biomedical research and the path he lays for the next generation of researchers."

The Canada Gairdner International Award is given to individuals who have demonstrated outstanding leadership in medicine and medical science and whose work has contributed significantly to improving the quality of human life. Begun in 1959, the awards have become Canada's foremost national and international awards.

Alter earned his medical degree at the University of Rochester Medical School and trained in internal medicine at Strong Memorial Hospital, Rochester, and at the University Hospitals of Seattle. He came to the Clinical Center as a senior investigator in 1969. In 2000, Alter was awarded the Clinical Lasker Award and in 2002, he became the first CC scientist elected to the National Academy of Sciences; in that same year he was elected to the Institute of Medicine.

GLOBAL BURDEN

CONTINUED FROM PAGE 1

tained injury, disease, death or risk, then you're in this report.

Along with 7 billion other folks.

The study's co-author, Dr. Chris Murray of the Institute for Health Metrics and Evaluation (IHME) at the University of Washington, recently visited NIH to present the results: "The Global Burden of Disease 2010 Study: What Does It Mean for the NIH and Global Health Research?"

His lecture and discussion in Natcher Auditorium, hosted by the Fogarty International Center, drew an engaged audience from NIH and beyond.

"A report of this sort represents a remarkable achievement," said NIH director Dr. Francis Collins in opening remarks.

"We spent a lot of time on methods," Murray said. And on tools: supple interactive graphs and cool maps depict shifts and trends over time.

For folks in global health, this is catnip.

Here's the gist. When deciding which health programs to offer, develop or continue, we need evidence. Using the construct of health loss, not income or productivity loss, GBD 2010 shows three massive shifts, Murray said. Since 1990, the starting point for the first study:

- ✔ The world has grown considerably older.
- ✔ Where infectious disease and childhood illnesses related to malnutrition were once the primary causes of death, now more people are dying from chronic, non-communicable diseases (NCDs) such as heart disease and cancer.
- ✔ Disease burden is increasingly defined not by premature death, but by disability: musculoskeletal disorders, mental health conditions, back and neck pain and injuries.

Obesity and high blood sugar are replacing a lack of food as leading risks, he added.

And in a study this large, "There were lots of limitations," as in separating comorbidities (co-

occurring diseases) in depression and in the risk of intimate partner violence in HIV.

So how do we think about these trends? Take measles, for example. As an overall disease burden, it has dropped from number 16 to 56.

"This is a global health success story," Murray said.

But some U.S. results were surprising: "[There's been] lower progress in women's deaths here than in other high-income countries," he said. "The U.S. did rather well for stroke, colorectal cancer, brain cancer, prostate cancer and falls. Then everything else is below average. We were worst in diabetes, heart disease and COPD [chronic obstructive pulmonary disease]."

"So this is a plea for collaboration and research from NIH," Murray continued. "GBD is a global public good. This should be a continuing process: Our goal is to shift to continuous updates as new studies are published and quickly incorporated."

This might mean partnering with NIH in creating new methods, expanding the study scope to include adverse events and forecasts and tracking funding at the national level by disease and injury.

"Ultimately, GBD 2010 offers a bigger vision on cost effectiveness," Murray said. "It becomes a vehicle for thinking about public health, primary care and integrated frameworks."

In an extended Q&A, Murray described what had surprised him most about the GBD: "The pace of change in 2 decades in the dramatic shift to chronic disability. It's so fast that people in the health ministries are still thinking [in] the way they were trained."

Dr. Charlotte Pratt of NHLBI focused on Africa: "The data is very depressing," she said, "especially when you look at the life expectancy from 25 to 40..."

"I think that the results from sub-Saharan Africa are not as depressing as they came across," Murray said. "If you look at life expectancy outside of southern Africa, there's been substantial improvement despite HIV in east Africa...And with ARV [anti-retroviral therapy] scale-up in the HIV-affected belt, from Kenya down to South Africa, in at least half those countries, there are marked drops, we think, in adult mortality."

"It's a story of real tangible progress," he contin-



NIH director Dr. Francis Collins (l) and FIC director Dr. Roger Glass (r) were on hand for Murray's lecture on the global burden of disease.

PHOTOS: ERNIE BRANSON

ued, “for malaria, for HIV, for child mortality... It’s a reasonable prediction to say that as long as resources keep flowing, Africa will soon be joining the rest of the developing world in having to deal with the challenges of NCDs and disability.”

Fogarty director Dr. Roger Glass queried Murray on a graph showing the U.S. on the bottom, as the worst in many areas, and Sweden at the top.

“Sweden’s a very homogeneous population,” said Glass. “Are those differences issues of health equity? Population homogeneity? Life-styles?”

“Have a look at a place like Denmark,” Murray suggested. “It’s doing just about as badly as the U.S. and it’s a very homogeneous place...”

“I must say I always struggle to understand why we do so badly on most of these metrics,” he continued. “It’s something that I find difficult to fathom. Part of it is the legacy of tobacco... But as time goes on, that’s increasingly hard to explain. Part of it is we have a worse obesity epidemic. And we’ve done much worse, maybe related to that, on managing blood pressure.”

“The type of analysis to answer what you’re describing, which is now becoming feasible,” said Murray, “would be to strip off, from these 19 [richest] countries, the effects of the top 10 risks—take away tobacco, take away alcohol, take away blood pressure—and then progressively see if the U.S. and these other countries converge, or how much is unexplained by that. Certainly it’s something that should be done.”

That sound you hear is NIH’ers crunching, and meta-crunching, those numbers. Murray invited everyone to explore IHME’s interactive tools, available to the public at www.health-metricsandevaluation.org/gbd.

The videocast is archived at <http://videocast.nih.gov/pastEvents.asp>. 

NCI’s Hunsberger Mixes Exercise, Commute

(Story in an occasional series on NIH’ers who embrace alternative commuting modes)

On Tuesdays and Thursdays, it takes Dr. Sally Hunsberger about 1 hour and 40 minutes to get to work. But none of that time involves sitting in traffic. On those mornings, she leaves at 6 a.m. from her Mt. Pleasant, D.C. neighborhood, and runs 11 miles to her office at Executive Plaza. “Slow and steady,” she says of her morning runs to work. She does this commute year-round.

“I grew up in Indiana, so cold weather doesn’t bother me,” she said. “I’ll admit it’s a pain when sidewalks aren’t shoveled. But I love running. It’s when I do my best thinking and planning.”

On mornings when she runs to work, Hunsberger goes home via Metro. The other three mornings, she’ll bike the short distance to the subway and hop on a train. But on days when she doesn’t run to work, she still jogs a 7-mile loop before leaving for NIH.

“Running to work is more efficient since I want to go for a long run anyway. So I feel like I’m saving time and helping the environment.”

Hunsberger began working at NIH in 1991 as a biostatistician at NHLBI. In 2000, she moved over to NCI, where she works with CTEP (Clinical Trials Evaluation Program).

“When I was younger, I worked in downtown Bethesda and would run 5 miles to work every day and 5 miles home. But once I had kids, I cut back to twice a week.”

Hunsberger has been running since she was 18. She no longer runs marathons but previously has run 6 of them, including ones in Richmond, Va. (where she went to graduate school), Charlottesville, Va., and the Marine Corps Marathon in D.C.

“When I ran marathons, I would feel pain but ignore it,” she said, so she decided to stop. “I’m a little nervous to run one now.”

For other exercise, Hunsberger plays Ultimate Frisbee once a week. “That will be my injury downfall,” she admits. She also coaches basketball at Oyster-Adams Bilingual School in Woodley Park, where her daughter is a 7th-grader. She says she enjoys jumping into the game on occasion when the team is short on players.

Hunsberger played basketball and tennis in college. “I ran to keep in shape for these activities,” she said. “Now I still run for an hour on days when I don’t run to work.”

If you have an alternative mode of commuting to and from NIH, especially in this era of BRAC-related congestion, let the *NIH Record* know and perhaps we can arrange a brief interview.—Dana Steinberg



NCI’s Dr. Sally Hunsberger has a unique commute.

PHOTO: DANA STEINBERG

BRAIN INITIATIVE

CONTINUED FROM PAGE 1

that show how individual brain cells and complex neural circuits interact at the speed of thought.

“There’s this enormous mystery waiting to be unlocked, and the BRAIN Initiative will change that by giving scientists the tools they need to get a dynamic picture of the brain in action and better understand how we think and how we learn and how we remember, and that knowledge will be transformative,” Obama said.

In an interview with BBC America, Collins said, “I think it is the most exciting life science initia-

tive in a long time, an effort to try to understand the most complex [structure] that we know of in the universe, namely the human brain. And to apply that in a way that will lead to insights about how to prevent and treat a long list of diseases from Alzheimer’s

to autism to epilepsy to traumatic brain injury to schizophrenia...it’s going to change our understanding of the brain.

“We really don’t understand the fundamental ways in which circuits in the brain create all of the amazing phenomena that our brains are capable of,” he continued. “We need to have a dream team of super scientific experts [who can] lay out some of the milestones and deliverables so that we can say more explicitly what the goals of this project are going to be—that’s coming fairly soon.”

NIH has established a working group co-chaired by Dr. Cornelia “Cori” Bargmann of the Rockefeller University and Dr. William Newsome of Stanford University. It will define scientific goals for NIH’s investment and develop a multi-year scientific plan. The working group, which reports to the advisory committee to the NIH director, has announced an ambitious plan to hold meetings every 3 weeks.

In interviews with reporters, Collins noted that deep brain stimulation, as a therapy for Parkinson’s disease, can be effective, but no one knows exactly why.

Obama said, “We can identify galaxies light years away, we can study particles smaller than an atom, but we still haven’t unlocked the mystery of the 3 pounds of matter that sits between our ears.”

In an interview with CNN, Collins noted that “there are 100 million Americans who suffer from diseases that affect the brain. It’s costing us \$500 billion each year to give health care to those individuals. If we’re ever really going to make progress, we have to build this foundation of understanding how the brain works.”

In an online video interview with the *Washington Post*, Collins said that the BRAIN Initiative is “rather similar to 1988, when the genome project was being talked about but nobody was quite sure whether the technology was up to the task, and whether the scientific community was ready to roll up their sleeves and do big science this way. Ultimately, as you know, that succeeded.”

He continued, “The technology has arrived at the point where we think we could do something pretty bold to figure out how the circuits in the brain actually function.”

Outlining first steps in the initiative, Collins said, “I think we will focus initially, because we have to, on tool development and on trying to understand some basic principles of how [brain] circuits work.” He predicted the task will be tougher than the Human Genome Project.

“I would say the brain is more difficult,” he explained. The HGP involved reading out the 3 billion letters in human DNA, he said. By contrast, “The brain is a very 3-dimensional [organ]. In fact, it’s 4 dimensions, because time really matters. So the complexity of what you’re trying to do is potentially much more challenging.”

Collins concluded, “For us at NIH, we’re hopeful that we can launch this in FY 2014 with a big push.”

The BRAIN Initiative will also include public-private partnerships with such organizations as the Allen Institute for Brain Science, the Howard Hughes Medical Institute, the Kavli Foundation and the Salk Institute for Biological Studies. In addition, the President will direct his Commission for the Study of Bioethical Issues to explore the ethical, legal and societal implications raised by this research initiative and other recent advances in neuroscience.

According to the President’s FY 2014 budget, NIH’s Blueprint for Neuroscience Research—an initiative that pools resources and expertise from across 15 institutes and centers—will be a leading NIH contributor to the implementation of the BRAIN Initiative. In total, NIH intends to allocate approximately \$40 million in FY 2014.

In the days following the President’s announcement, Collins was highly sought by various

“The technology has arrived at the point where we think we could do something pretty bold to figure out how the circuits in the brain actually function.”

media, including an appearance on *The Colbert Report* on Apr. 4, winning the accolade "Person of the Week" by ABC News on Apr. 5 (which dubbed him "Brainiac in Chief"), giving interviews to CNN, the *Washington Post*, NPR's *Science Friday* and the *Diane Rehm Show* (see <http://thedianerehmshow.org/audio-player?nid=17484>), BBC World News and C-SPAN's *Washington Journal*.

Collins also coauthored an op-ed article in the Apr. 9 *Wall Street Journal* with Paul Allen, whose Seattle-based institute is deeply interested in brain research. Their description of the brain—"in essence, a piece of highly excitable matter"—matches a burgeoning effort to try to understand its workings. 🗞

Taylor Named NIGMS Capacity-Building Chief

Dr. W. Fred Taylor is the new chief of the Capacity Building Branch in the NIGMS Division of Training, Workforce Development, and Diversity. The branch manages



the Institutional Development Award (IDeA) program, which fosters basic, translational and clinical biomedical research at institutions in states where NIH funding has historically been low. The branch also supports a number of programs aimed at increasing the research capabilities of institutions with substantial enrollments of students from groups underrepresented in the biomedical and behavioral sciences as well as enhancing the research competitiveness of faculty at those institutions.

Taylor joined NIGMS in 2011 from the former National Center for Research Resources, where he was a health scientist administrator for 11 years, during which he helped guide the growth of the IDeA program. Before coming to NIH, he was deputy director of the thermal stress program and director of the hyperbaric environmental adaptation program at the Naval Medical Research Institute.

Taylor earned a B.S. in biology from Saint Mary's College of California and a Ph.D. in physiology from the University of Texas Health Science Center at San Antonio, where he also conducted postdoctoral research.

His honors include a 2012 NIH Director's Award.



Dr. Jonathan Weissman

Nirenberg Lecture Features Weissman, May 1

Dr. Jonathan Weissman of the University of California, San Francisco, will deliver the third annual Marshall W. Nirenberg lecture as part of the 2012–2013 Wednesday Afternoon Lecture Series. Weissman's lecture, "Monitoring Protein Synthesis One Codon at a Time Through Ribosome Profiling," will be held May 1 at 3 p.m., in Masur Auditorium, Bldg. 10.

Weissman is a Howard Hughes Medical Institute investigator and a professor of cellular and molecular pharmacology and of biochemistry and biophysics at UCSF. His research examines how cells ensure that proteins fold into their correct shape, as well as the role of protein misfolding in disease and normal physiology. He also is developing experimental and analytical approaches for exploring the organizational principles of biological systems.

Weissman received his undergraduate physics degree from Harvard College. After obtaining a Ph.D. in physics from the Massachusetts Institute of Technology, where he worked with Peter Kim, Weissman pursued postdoctoral fellowship training in Arthur Horwich's laboratory at Yale University School of Medicine. He was awarded the Raymond and Beverly Sackler International Prize in Biophysics and is a member of the National Academy of Sciences.

The lecture, established in 2011, recognizes Nirenberg for his work to decipher the genetic code, which resulted in his sharing the 1968 Nobel Prize in Physiology or Medicine. Nirenberg's career at NIH spanned more than 50 years and his later research focused on neuroscience, with particular emphasis on neural development. The Nirenberg lecture recognizes scientists who have made outstanding contributions to genetics and molecular biology.

For lecture information and reasonable accommodation, contact Jacqueline Roberts, (301) 594-6747.



Women's Health Studies Seek Healthy Volunteers

Healthy women ages 18-50 are invited to participate in outpatient research studies. Compensation is provided. Call (301) 496-9576 and refer to studies 81-M-0126 and 88-M-0131.

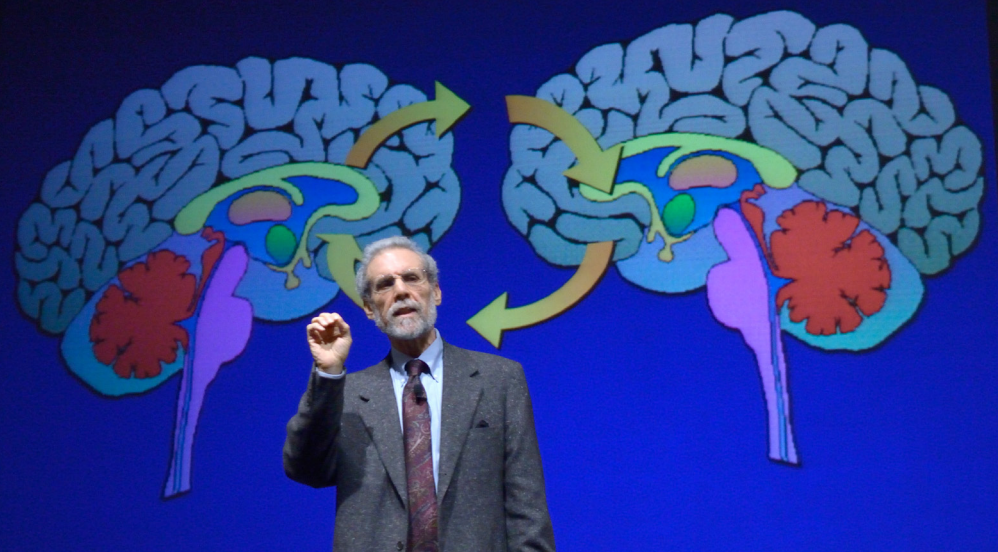
Premenstrual Syndrome Research Studies

Women ages 18-50 who struggle with irritability, anxiety or sadness prior to menstruation are invited to participate in outpatient research studies. There is no cost for participation. Compensation may be provided. Phone (301) 496-9576 and refer to study 81-M-0126.

Midlife & Menopause Research Studies

Women ages 40-60 who struggle with irritability, anxiety, sadness or loss of enjoyment at the time of the menopause transition are invited to participate in outpatient research studies. There is no cost for participation. Compensation may be provided. Call (301) 496-9576.

Social Brain



GOLEMAN

CONTINUED FROM PAGE 1

Above:

Goleman stresses the importance of emotional intelligence to NIH leadership.

PHOTOS: ERNIE BRANSON

There followed a shock of recognition—we all know that leader right?—and universal laughter.

There was a lot of laughter throughout Goleman's talk, "Leading with Emotional Intelligence," the second lecture in the 2013 Deputy Director for Management Seminar Series.

The audience's adjectives buttressed Goleman's well-known thesis: the worst leaders have serious deficits in emotional intelligence (EI), or the so-called soft skills embodying four areas: self-awareness, relationship management, empathy and self-management.

Goleman first introduced the idea of EI to the public nearly two decades ago. Today it is an accepted concept in progressive, effective leadership. Goleman cited studies showing that effective leaders embody not only cognitive and technical skills, but more importantly social skills, how we manage ourselves and our relationships with others.

One major problem in organizations, Goleman said, is that the wrong people often rise to positions of leadership.

"Many leaders who end up failing are mistakenly promoted to their positions solely because of their technical abilities," Goleman said. They perform tasks well, but lack the crucial social skills that translate into effective leadership.

"These leaders tend to manage others the way they manage themselves as high-level performers: by being excessively critical." They tend to micro-manage and negatively impact the organization.

For example, giving feedback in an aloof manner, monitoring your staff's emails, offering no praise or encouragement all have disastrous effects on morale, performance and retention.

These managers frequently lack one key trait of the best bosses: self-awareness.

Leaders with high emotional intelligence know their feelings, goals, drives, values, strengths and limits.

"The best leaders know what they are good at and when they have to rely on someone else," Goleman said. They don't operate in solitary confinement.

The emotional message that a leader sends can have enormous impact on staff's ability to perform effectively and productively. Goleman said this gives leaders an extra responsibility.

"Leaders are senders, whether they know it or not."

Goleman cited studies at the Yale School of Management in which a leader was put in a bad mood and sent in to do a group exercise. "The group caught the bad mood and the group's performance suffered," he said.

The studies also showed enhanced performance when leaders entered the group exercises in a positive mood.

Leaders' mood can affect staff performance.

Self-management is crucial during times of organizational trauma. This is true even of perceived trauma or threats.

The amygdala, the brain's emotional center, acts as radar for threat and can paralyze the brain's executive center, or prefrontal cortex, during moments of stress when thinking, creativity and decision-making are impaired. Goleman calls these episodes "amygdala hijacks" that staff suffer when unfairly criticized or blamed by the boss or during periods of uncertainty.

What can leaders do to help their staffs during these times?

It is important today for leaders to pay full attention to their employees. "Electronics have ratcheted up the rate and intensity of distractedness," he said. "It now takes a more intentional decision to pay attention to the other person."

Goleman demonstrated a simple way to raise emotional intelligence. He asked the audience to participate in the "mindfulness exercise," which enhances the ability to manage emotions and heightens self-awareness and focus. He asked audience members to close their eyes and focus on their breathing.

"When your mind wanders," Goleman said, "just bring it back to the breath."

Masur went silent for several minutes. 🙏



NINR director Dr. Patricia Grady (seated, middle) and attendees have a discussion after Dr. Sarah Szanton's presentation, "A Community-based Approach to Self-Management."

Nursing Research Roundtable Examines Science of Self-Management

NINR and the American Nurses Association (ANA) recently cosponsored the 2013 National Nursing Research Roundtable titled, "The Science of Chronic Illness Self-Management." Since 1987, the annual event has brought together an interdisciplinary group of practitioners, policy leaders and educators from across the country. This year, participants discussed the latest evidence-based strategies that help individuals with chronic conditions and their caregivers better understand and manage their health.

NINR director Dr. Patricia Grady and Dr. Karen Daley, president of the ANA, welcomed attendees at the opening session. Grady noted that "self-management has always been an important research program at NINR...but it is growing increasingly important to the public." She then outlined NINR's current role in funding research and training in this area, as well as described future opportunities.

With rising rates of chronic illness and increasing financial pressures on the nation's health care system, self-management has become an important topic. Chronic disease—such as cardiovascular disease, cancer and diabetes—accounts for more than 75 percent of health care costs in the U.S., according to the Centers for Disease Control and Prevention. Patients with chronic illnesses or conditions may face many years of associated disability and distress. Increasing evidence suggests that coordination of care with clinicians, as well as the individual's ability to manage his or her own health long-term, are critical to effectively dealing with these issues.

To conclude the day, Grady stated, "Current health issues demand self-management and we need to support this proactively. The research presented today informs practice and policy and helps everyone around the table—not just in research, but also in curricula and practice."

NINR will partner with the Oncology Nursing Society for the 2014 National Nursing Research Roundtable, scheduled for Mar. 6-7, 2014.

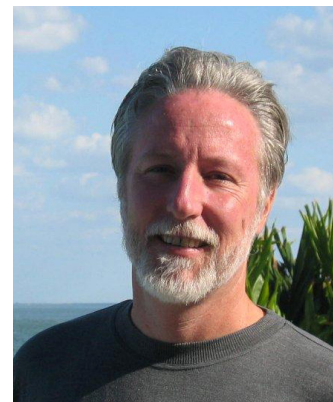
Brown To Speak on Equity for Disease Prevention in Minorities

Dr. C. Hendricks Brown will discuss "Achieving Scientific Equity for the Prevention of Mental, Emotional and Behavioral Disorders in Minorities and Other Populations" on Thursday, May 9, from 1 to 3 p.m. in Natcher Bldg., balcony A. The seminar is part of the NIH Office of Disease Prevention's Medicine: Mind the Gap seminar series.

Brown is professor of epidemiology and public health at the University of Miami Miller School of Medicine, where he is also director of the Social Systems Informatics Program in the Center for Computational Science.

Brown has developed innovative randomized field trial designs for preventing drug abuse, depression and suicide.

No advance registration is needed. Email Paris.Watson@nih.gov or call (301) 496-6615 for sign language interpreters or other reasonable accommodation.



NIH Teams with HBO on 'Weight of the Nation for Kids,' Airing May 7

The HHS *Innovates* award-winning and Emmy-nominated *The Weight of the Nation* obesity documentary series and public education initiative will be expanding its reach beginning on May 7 with a series of short films for young people. Leaders of the NIH obesity research task force from NIDDK, NHLBI, NICHD and NCI provided scientific guidance for *The Weight of the Nation* adult and youth films.

As with the original series, *The Weight of the Nation for Kids* is a presentation of HBO and the Institute of Medicine, in association with the Centers for Disease Control and Prevention and NIH, and in partnership with the Michael & Susan Dell Foundation and Kaiser Permanente.

The kids' series consists of three half-hour segments that highlight young people actively improving the health of both themselves and their communities. The first segment in the family-friendly series, "Kebreeya's Salad Days," shows a teenager's efforts to grow a school garden and change her school's and family's eating habits in the process. "Quiz Ed!" tests the nutrition and physical activity knowledge of students, showing steps kids can take toward a healthier lifestyle. "The Great Cafeteria Takeover," which first aired with the original series in May 2012, will rerun, featuring New Orleans kids who transform their school lunch menu.

The films will air consecutively beginning May 7 at 5:30 p.m. EDT on HBO and will rebroadcast several times throughout May. All of the segments will air for free online at www.hbo.com/weightofthenation.

For more on the collaboration, as well as NIH weight-control information and research resources, go to www.nih.gov/health/NIHAndweightofthenation/.

milestones

Mentor to Many

NIGMS's McNairy Retires After 37 Years of Federal Service

By Jilliene Drayton

"My mother once told me that no excuse was good enough for failure," said Dr. Sidney A. McNairy, Jr. "She did not achieve more than an eighth-grade education, but she made sure that her children succeeded."



Over 200 colleagues, family members and friends from as far away as Hawaii attended Dr. Sidney McNairy's retirement reception. During the event, Dr. Karam Soliman (r) of Florida Agricultural and Mechanical University presented McNairy with the university's President's Award.

HEADSHOT PHOTO: MELINDA URBINA



McNairy's mother encouraged him to reach goals that at the time seemed unattainable for an African American in the segregated south. McNairy not only accomplished his own career dreams, but also went on to ensure that others like him achieved theirs.

After nearly four decades of federal service, all at NIH, McNairy recently retired as chief of the Capacity Building Branch in the NIGMS Division of Training, Workforce Development, and Diversity.

Born in the projects of Memphis, Tenn., McNairy developed an interest in science at a young age. "I occasionally stayed on my grandmother's farm, where I was fascinated by everything from how chickens hatched from eggs to how milk made butter," he said. "I decided to pursue science because I had a curiosity and an aptitude for it and math."

The first of his family to graduate from college, McNairy earned a bachelor's degree in chemistry from LeMoyne-Owen College in Memphis. He then pursued a master's degree in biochemistry at Purdue University, where he was 1 of 12 African-American graduate students. At the urging of his senior thesis committee, McNairy went on to earn a Ph.D. in biochemistry from Purdue.

McNairy began his professional career at Southern University in Baton Rouge, where he served as a professor of biochemistry and director of the Health Research Center. He also held many visiting scientist appointments at both companies and federal agencies, including Pfizer, Eli Lilly, General Electric, Standard Oil of Califor-

nia and the Centers for Disease Control and Prevention.

A mentor to many, McNairy said he worked to motivate and inspire students: "I tasked my students with writing their own original research papers. Many of my mentees went on to successful careers in research and medicine."

After 10 years in academia, McNairy joined NIH as a program director at what was then the Division of Research Resources (later the National Center for Research Resources). "I originally visited NIH to learn how to compete for research support," he recalled. "I was then offered a permanent job, and I decided to stay for a year—but that 1 year turned into 37."

In 1995, McNairy was appointed associate director for research infrastructure and director of the Division of Research Infrastructure at NCRR. In this position, he developed and oversaw the Research Centers in Minority Institutions (RCMI), Institutional Development Award (IDeA) and Research Infrastructure in Minority Institutions programs. He also directed the Animal and Research Facilities Improvement programs and the Science Education Partnership Awards.

In early 2012, after NCRR was dissolved, McNairy joined NIGMS, where he continued to manage the IDeA program as well as two other NIGMS-supported capacity-building programs.

"Sidney made a tremendous impact on the IDeA and the RCMI programs," said Dr. Fred Taylor, new chief of the Capacity Building Branch. "His unwavering commitment and passion to address the health issues that affect many of the communities that these programs serve are what helped make IDeA and RCMI successful today."

During his career, McNairy received many honors and awards, including nine honorary doctorate degrees, election to the board of trustees at his alma mater and several NIH Director's Awards. He also led an NIH delegation to the 66th Lindau Nobel Laureate Meeting, which he described as one of the highlights of his career.

In retirement, McNairy said he first wants to wind down—but only for a short period. "I plan to serve as a mentor for developing investigators, perhaps return to teaching, pursue my culinary interests and one day write a book."



CSR's Dr. Everett Sinnett recently retired.

CSR Scientific Review Officer Sinnett Retires

Retirement will allow Dr. Everett Sinnett to take a deep breath. Good, deep breaths have been his field of interest throughout his career, including 32 years at NIH. He retired in December as a scientific review officer for the respiratory integrative biology and translational research study section at the Center for Scientific Review.

Growing up near the ocean in Maine, Sinnett became intrigued by comparative mammalian lung mechanics, especially the adaptation of marine mammals to their environments. After a B.S. in biology from MIT, he earned his Ph.D. in marine biology from the Scripps Institution of Oceanography. One notable research expedition took him to Antarctica, where he spent two months studying Weddell seals.

Sinnett came to NHLBI in 1980 after postdoctoral work at Harvard School of Public Health. As a program officer, Sinnett said a highlight was serving as contract officer for the HIFI (High Frequency Intervention) trial. This trial found that a new form of ventilation for premature infants, about to be widely used, could have serious side effects.

"This was a critical study that required an excruciating level of detail," said James Kiley, director of NHLBI's Division of Lung Diseases. "With this study and the rest of his portfolio, Ev did everything at the highest level." When Kiley joined NIH, he noted, "Ev served in a mentoring role, helping me understand my new position as a health scientist administrator."

In 1990, Sinnett moved to CSR, where he took over the first respiratory-focused study section. (Previously, cardiovascular review groups considered this research.)

At CSR, as at NHLBI, Sinnett's thoroughness was valued. "Ev became an institution over his many years of service," said Lawrence Boerboom, chief of the cardiovascular and respiratory services integrated review group. "He was a meticulous organizer of his review meetings. He prided himself in carefully assessing the needs of each application in his study section and recruiting reviewers to meet those needs."

When Sinnett came to NIH, paper and pen were the norm. He served on many committees to improve electronic processes, including being the CSR IMPAC II liaison for more than a decade. "Ev was the go-to person for us," said Eugenia Chester, customer services manager in the Office of Extramural Research. "He was instrumental in helping us design and test systems that benefitted peer review and the whole NIH."

A tennis, biking and all-around exercise enthusiast, Sinnett served on the NIH worksite health promotion action committee, leading to healthier offerings in vending machines and cafeterias, among other improvements. He mapped walking routes around Rockledge and advocated for no-cost access to showers at NIH for employees after they exercise on their own.

Sinnett donated 128 units of blood at the Clinical Center during his career, which he calculated as equivalent to his body weight.

Immediate plans include more time in Maine at a family home on Casco Bay and more tennis and bridge. He and wife Rachel will visit one of their two sons (they also have a daughter) in Beijing this year. Not surprisingly, he has been thinking about Beijing's notorious air quality and its effect on respiration.

Former FOIA Chief Belk Mourned

Joanne Hebb Belk, 89, who directed NIH's compliance with the Freedom of Information Act for many years, died Mar. 4 at her home in Hanover, N.H.

Belk was born in Detroit. She graduated from Framingham Academy and High School (Mass.) and spent summers and free time writing and editing for Boston area newspapers: the *Framingham News* and the *Bostonian*. She attended Simmons College, from which she received her B.S. in June 1944 and immediately entered the Women's Army Corp.

In 1946, under the auspices of the GI Bill, she studied in Germany, Sweden and Switzerland for 1 year in the American Students Abroad Program. She returned to the United States to write on the staff of the *Boston Herald*.

In 1967, she joined the staff of *Science* magazine as an editor, received her paralegal certification from George Washington University in 1975, and, in 1977, began a 22-year career at NIH as acting director of the FOIA Office, part of the Office of Communications and Public Liaison, OD. She received an NIH Merit Award in 1989.

Belk retired in 1998, at age 75. In retirement, she travelled to Africa, Europe and Asia, often with her best friend Marilie "Mouse" Rockefeller of Washington.

She is survived by her son Samuel ("Q") and two grandchildren.





Oliver "Pete" Morton recently retired after 44 years at NIH. He was in charge of more than 30 electronic systems that process extramural grants.

OER's Morton Retires from eRA After 44 Years at NIH

By Manju Subramanya

Tom Mason, a longtime colleague and friend of Oliver "Pete" Morton, program manager at OER's Electronic Research Administration (eRA), competed with him one year on who could take the best photograph. On a trip to capture the cherry blossoms in D.C., Mason, the eRA operations chief, was disappointed—the crowds, tour buses and drizzle had ruined his chance of getting the right picture. Then Morton showed up with flawless renditions of the pink blossoms. Turns out he had simply used Photoshop to remove the extraneous stuff. Photography is a metaphor for Morton's life, Mason said. "He focuses on what truly matters."

That knack of separating the wheat from the chaff has stood Morton in good stead in his 44-year career at NIH. It started at the Clinical Center in 1969, when Morton was hired as a health physicist, wound through the Center for Information Technology and ended at eRA, which he joined in 2004. He retired at the end of March.

At eRA, where he oversaw the 30-plus electronic systems that process extramural grants, Morton quickly changed the organization from a pure IT shop to one that understood the extramural grants business and worked with the grants community to identify their needs and priorities. He introduced the concept of customer relationship managers, who worked with the 4,600 NIH staffers and the global community of over 165,000 researchers using the eRA systems.

"Pete introduced a real sense of customer service and made eRA systems as flexible and responsive as possible," said Dr. Sally Rockey, NIH deputy director for extramural research and OER director. "With eRA policies and process, he has established a strong partnership with institutes and the extramural research community."

Dr. Brent Stanfield, director of NIDDK's Division of Extramural Activities, recalled that NIH was largely a paper environment before eRA's IMPAC modules came into being. "The vast majority of NIH's business is extramural funding," he said. "If you took the systems away, there would be riots. We are all so dependent on it."

"Pete has achieved a lot. He has been very responsive to the needs of the NIH community," Stanfield added.

"When we accomplished milestones of our systems, Pete has led the way," Rockey said, citing Morton's involvement in moving grant applications from paper to now almost 100 percent elec-

tronic. "He has been instrumental in changing the availability of eRA systems to 24/7, which is fantastic."

Recently, Morton has facilitated collaboration with federal agencies such as NSF and DoD on areas of mutual benefit; eRA systems are already used by AHRQ, CDC, FDA, SAMHSA and VA. "eRA is seen as a trusted partner," he said.

Senior eRA managers lauded Morton for his can-do attitude, his humility, his ability to make everyone feel valued, his calming force, his openness, his motivation of staff and his penchant for not taking life too seriously.

In retirement, Morton looks forward to spending more time with his wife, Cindy, his daughter Jennifer and playing with his 10-year-old grandson Chris. He also plans to tend to his 350-acre pine tree farms near Macon, Ga., and take photo expeditions.

Parting advice? "Listen very, very carefully to customers and staff and bring that input to bear on developing a vision of what our future should be," Morton said. "It is the hardest thing to do, but the most important."

NIH Mourns Sheldon Cohen

By Claudia Wair

Dr. Sheldon G. Cohen, 94, a noted research scientist, physician and medical historian, died Mar. 26 in his Chevy Chase home.

Cohen graduated from Ohio State University in 1940 and received his M.D.

from New York University School of Medicine in 1943. After an internship at New York's Bellevue Hospital, he served as a flight surgeon, rising to the rank of captain, with the U.S. Army Air Corps during World War II. Subsequently, he completed residencies in internal medicine and allergy at the Fort Howard Veterans Administration Hospital in affiliation with Johns Hopkins School of Medicine and the University of Maryland, and then finished a research fellowship in applied physiology and immunology at the University of Pittsburgh.

From 1952 to 1972, he pursued a career in Wilkes-Barre, Pa., combining clinical practice in allergy and internal medicine and academic and



Dr. Sheldon Cohen, circa 1984

research endeavors at Wilkes College. While a professor of experimental biology, he developed a biomedical teaching and research program for advanced undergraduate students.

He joined NIH in 1972 as a training consultant to NIAID. The following year, he became chief of the Allergy and Immunology Branch, and in 1977, was selected for the newly created position of director of the institute's Immunology, Allergic and Immunologic Disease Program (now DAIT).

"Sheldon Cohen was a dedicated physician and scientist who made numerous contributions to the understanding of allergic diseases," said NIAID director Dr. Anthony Fauci. "His long career at NIAID was marked by his enthusiasm for and commitment to the field, and his work as a medical historian leaves an enduring legacy."

Cohen served in several professional societies, including as executive vice president of the Lupus Foundation of America and as director of the World Health Organization Collaborating Centre for Allergic Diseases. He also was a member of the WHO expert panel on immunology and the National Research Council committee on aerobiology.

"Although busy as a science administrator, he always had time for consultations, often at great length, on difficult medical cases," said FIC's Richard Krause. "He was a gentleman of the old school: always kind, considerate and with the patience of Job when assisting others."

Cohen joined the American Academy of Allergy, Asthma & Immunology (AAAAI) in 1950, and he became a fellow of the organization in 1953 and an emeritus fellow in 1989. He served as AAAAI historian from 1963 to 1969 and wrote historical retrospectives for the organization's 25th and 50th anniversaries. He was awarded the AAAAI Distinguished Service Award in 1971.

After completing his tenure as director of the Immunology, Allergic and Immunologic Disease Program in 1988, he continued to work at NIH as a scientific advisor at NIAID and as visiting scholar at the History of Medicine Division at the National Library of Medicine. He worked closely with NLM staff to develop the Breath of Life exhibition. In 2001, he commissioned bronze busts of Edward Jenner, Louis Pasteur and Moses Maimonides for permanent display in NLM's History of Medicine Division reading room.

Dr. Stephen Greenberg of NLM's History of Medicine Division remembers that "Dr. Cohen was very fond of cheesecake, particularly with strawberries, but as he grew older, he was

advised to limit his intake. To circumvent that, he would occasionally arrive in the History of Medicine Division with a cheesecake for the staff. I suspect he made deliveries to other offices as well."

Cohen lived to see the third edition of his *Excerpts from Classics in Allergy* published in the weeks before his death. He was working on a new e-book on well-known public figures with asthma.

"Many will remember his inquisitive spirit, dedication and diligence," said NIAID's Dr. David Morens, "as well as the very high bar he set for other scholars in our institute."

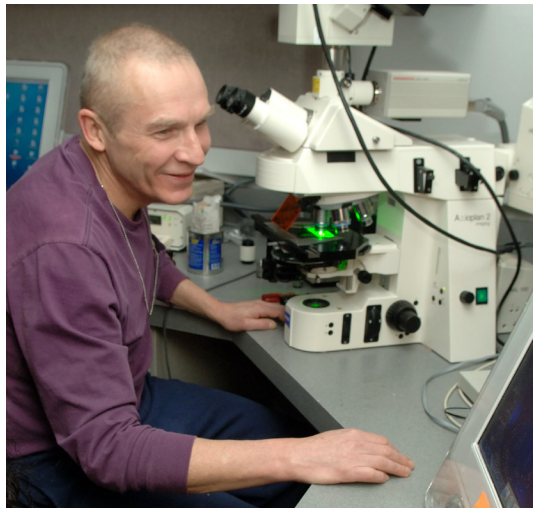
Cohen enjoyed fishing and freshwater sailing during his years in Pennsylvania. His curiosity led him to explore other cultures through international travel with friends and colleagues. More recently, he enjoyed watching college sports on television, and when his Ohio State teams took to the field or the court, he would kindly rib his University of Michigan great-nephew about the ongoing rivalry.

Dr. Bernard Janicki, Cohen's onetime deputy, was "impressed by his extensive clinical and basic science knowledge and by his compassion, personal warmth and agile wit. We shared official travel experiences as well as many off-duty activities; my children welcomed him as an unofficial family member. He dedicated his life to serving others and will be missed very much."

His sister, Bernyce Cohen Epstein, preceded him in death in 2004.

Cohen is survived by his nephew, Lee Epstein; niece, Jayne Epstein; and three great-nephews.

A memorial service will take place at 1:30 p.m. on Sunday, May 19 at Temple Emanuel, 10101 Connecticut Ave., Kensington, MD 20895. In lieu of flowers, contributions may be made to NLM's Historical and Rare Book Collection or to a charity of the donor's choice.



Medical Arts' Dreyfuss Dies at 58

Ricardo "Rick" Dreyfuss, who worked as a photomicroscoper for the Division of Medical Arts, Office of Research Services, died Mar. 14 at Holy Cross Hospital in Silver Spring. He was 58 years old.

Dreyfuss had 33 years of experience in creating images that illustrated the most complex biomedical research results, processes and procedures. His photomicrographs graced the covers of count-

less scientific journals. He received the NIH Director's Award in 1994.

In addition to his work as a photographer, Dreyfuss was a gifted artist and woodworker, and a musician. He was born in San Bernardino, Calif., and served in the Army in the 1970s in Germany.

Dreyfuss is survived by his wife of 30 years, Lana, four children, a brother and two sisters. ☐

Researchers Create Next-Generation Alzheimer's Model

A new genetically engineered lab rat that has the full array of brain changes associated with Alzheimer's disease supports the idea that increases in a molecule called beta-amyloid in the brain causes the disease, according to an NIH-funded study published in the *Journal of Neuroscience*.

"We believe the rats will be an excellent, stringent pre-clinical model for testing experimental Alzheimer's disease therapeutics," said study senior author Dr. Terrence Town at the University of Southern California Keck School of Medicine.

Alzheimer's is an age-related brain disorder that gradually destroys a person's memory, thinking and the ability to carry out even the simplest tasks. Affecting at least 5.1 million Americans, the disease is the most common form of dementia in the United States. Pathological hallmarks of Alzheimer's brains include abnormal levels of beta-amyloid protein that form amyloid plaques; tau proteins that clump together inside neurons and form neurofibrillary tangles; and neuron loss. Additionally, glial cells—which normally support, protect or nourish nerve cells—are overactivated in Alzheimer's.

Promising Results Shown in Treating a Lymphoma in Young People

Patients with a type of cancer known as primary mediastinal B-cell lymphoma who received infusions of chemotherapy, but who did not have radiation therapy to an area of the thorax known as the mediastinum, had excellent outcomes, according to clinical trial results. Until now, most standard treatment approaches for patients with this type of lymphoma have included radiation therapy to the mediastinum. However, mediastinal radiation is associated with substantial long-term toxic side effects.

The results of this single-arm trial, which followed 51 patients for a period of up to 14 years, was conducted by researchers at the National Cancer Institute and appeared Apr. 11 in the *New England Journal of Medicine*.

Primary mediastinal B-cell lymphoma mainly affects people from their teenage years to their early 30s. Many patients are cured with a combination of chemotherapy and radiation therapy. However, even with this treatment, about 20 percent of patients see their disease progress.—compiled by Carla Garnett

Fat-Free See-Through Brain Bares All

Scientists can now study the brain's finer workings, while preserving its 3-D structure and integrity of its circuitry and other biological machinery.

A breakthrough method, called CLARITY, developed by NIH-funded researchers, opens the intact postmortem brain to chemical, genetic and optical analyses that previously could only be performed using thin slices of tissue. By replacing fat that normally holds the brain's working components in place with a clear gel, they made its normally opaque and impenetrable tissue see-through and permeable. This made it possible to image an intact mouse brain in high resolution down to the level of cells and molecules. The technique was even used successfully to study a human brain.

"CLARITY has the potential to unmask fine details of brains from people with brain disorders without losing larger-scale circuit perspective," said NIH director Dr. Francis Collins, whose NIH Director's Transformative Research Award Program helped to fund the work, along with a grant from the National Institute of Mental Health.

New Genetic Link Found Between Normal Fetal Growth, Cancer

Two NICHD researchers—Dr. Julian Lui and Dr. Jeffrey Baron—have discovered a new genetic link between the rapid growth of healthy fetuses and the uncontrolled cell division in cancer. The findings shed light on normal development and on the genetic underpinnings of common cancers. The work, conducted using mouse and human tissue, appeared in the Apr. 9 *Proceedings of the National Academy of Sciences*.

"We've long known that some of the genes that promote rapid growth in prenatal and early postnatal life become reactivated in cancer cells," said Baron. "Now we've identified a molecular switch that appears to turn on some of these genes, taking us a step forward in understanding normal body growth and the abnormal growth in some types of cancer."

Before birth, a team of more than 200 growth-promoting genes is highly active, fueling the fetus' explosive growth. After birth, these genes are gradually switched off, apparently to slow body growth as we age and approach adult size. In cancer cells, some of these genes can be switched back on.



Scientists can now study the brain's finer workings, while preserving its 3-D structure and integrity of its circuitry and other biological machinery.

feedback

Want to know more about some aspect of working at NIH? You can post anonymous queries at www.nih.gov/nihrecord/index.htm (click on the Feedback icon) and we'll try to provide answers.

Feedback: Is there a policy on where government vehicles (utility trucks) can be parked? On a few occasions I have noticed a government vehicle parked in Bldg. 21's general parking lot. On one occasion I have seen a blue utility truck parked for almost one week in the same spot. Seeing the parking crunch, should such vehicles be taking up these spots during working hours? I am sure if this vehicle was parked in red parking that it would have been hastily removed.

Response from the Office of Research Services: NIH Parking Policy 1410 delineates the priority for parking spaces on the NIH campus. Vehicles designated for "official use" (vehicles owned or leased by the U.S. Government) have the highest priority for assignment of parking spaces. Government vehicles should only park in spaces marked specifically for "Government Vehicles." Anyone assigned a government vehicle should contact Rusty Mason, (301) 451-4811, in the Office of Research Services, Division of Amenities and Transportation Services, to receive assigned parking.

All vehicles not parked in compliance with policy or law are subject to ticketing or towing by the NIH Police. Violators who park a government vehicle illegally can or could be responsible for any action or cost associated with the incident and can also face administrative discipline. If you observe a government vehicle parking in a space not reserved for government vehicles, contact the NIH Police, with the license plate number, at "311" from an NIH phone or (301) 496-5685 from a mobile device.

Feedback: Can you provide an update on the Maxiflex pilot that you wrote about last year? (*NIH Record*, Mar. 30, 2012).

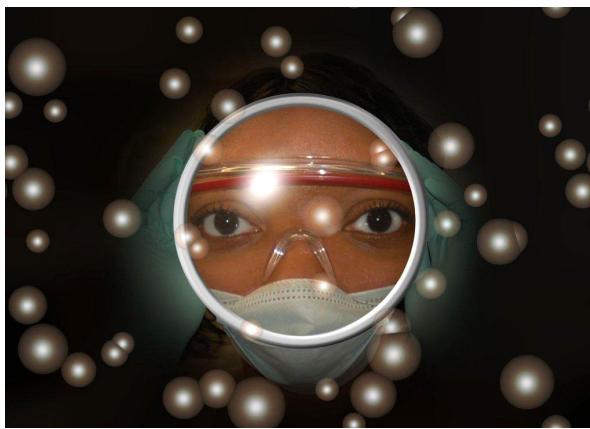
Response from the Office of Human Resources: After successful implementation of the Maxiflex pilot in several institutes and centers, the Office of Human Resources is prepared to release Maxiflex in ITAS to the NIH community this spring.

Maxiflex is a type of flexible work schedule in which an employee may vary the number of hours worked on a given workday, the number of hours each week, and split his/her work day within the limits established by the IC. This new work schedule was created to address the ongoing needs of the

NIH workforce to meet operational requirements that are not always limited to a traditional work schedule, while recognizing our dedicated staff's worklife demands on their time.

The Maxiflex pilot included a cross-section of participants from intramural to administrative staff. The Center for Information Technology and Office of Human Resources staff completed enhancements to ITAS necessary to facilitate Maxiflex timekeeping in March 2013. The ITAS system updates are on target to be released in late April with a short testing period to ensure operational functionality.

Maxiflex, like all other work schedules, is subject to supervisory approval based on organizational work requirements. The Office of Human Resources is confident that all ICs will have Maxiflex as a new work schedule option in ITAS by late May-early June 2013. 📧



Winners Named in Safety Photo Contest

Winners were recently announced in the Office of Research Services' Division of Occupational Health and Safety 2012 "In Focus! Safe Workplaces for All" photo contest. For the second year, the contest served as an entertaining way to document workplace safety. The judges awarded first place to

Howard "Wes" Hickman of the National Institute of Allergy and Infectious Diseases for his photo of colleague Towanda Carroll (above). There was a tie for second place between two construction-related safety photos taken by Hickman and Dr. Dale Lewis, staff scientist at the National Cancer Institute. Third place went to Dr. Samarendra Singh, a visiting research fellow in the National Institute of Diabetes and Digestive and Kidney Diseases. All of the winning photos can be seen at www.ors.od.nih.gov/sr/dohs/HealthAndSafety/infocus/Pages/default.aspx. Below are contest winners (from l) Singh, Lewis and Hickman.



NIH Program Focuses on Accommodations For Low Vision

By Jan Ehrman

Life goes on, despite vision loss.

Millions of men, women and children are affected by low vision or blindness and face daily difficulties. But help, often in the form of assistive technologies, adaptive devices and perhaps most important, rehabilitative training, can improve the situation for many. That was the theme of “Going Blind and Going Forward...When There Is No Cure,” a program sponsored by the National Eye Institute and the group 3 Blind Mice, held recently in Lipsett Amphitheater.

According to NEI, low vision means that even with glasses, contact lenses, medicine or surgery, one’s visual acuity cannot be corrected. Whether the vision loss is sudden or progressive, people find that everyday activities such as cooking, reading, crossing the street, using a computer or even watching television become difficult and require new skills. Low vision is most often the result of an eye disease, injury to the eye or other health condition. Leading causes include macular degeneration, retinitis pigmentosa (RP), glaucoma, diabetic retinopathy, optic neuritis, albinism and cataract. One out of three people age 65 and older experience a low-vision disorder.

The well-attended NIH event focused largely on the film *Going Blind*, directed and produced by Joseph Lovett, who has glaucoma. While depicting his own “emotional rollercoaster,” due to progressive loss of sight, Lovett chronicled the lives of several other people living with low vision or blindness and how each one has overcome or successfully adapted to vision loss.

“You learn to use what you have,” said Jessica, a young woman featured in the film, who lost her vision in a matter of months from diabetic retinopathy. A teacher and former artist, the spry New Yorker relies largely on her guide dog Chef to help navigate the outside world. With vision that is restricted to light and shadow only, Jessica learns how to utilize assistive technologies such as JAWS, a screen reader for computer use, and Kurzweil, an optical character recognition program to navigate the computer and read her mail. Learning new skills and non-visual techniques, she continues life as an artist, teaching photography to both sighted students and those with vision loss.

Ray is another person chronicled in the documentary. Diagnosed with RP, a disease affecting one out of every 4,000 people in the U.S., he



At left above is Teresa Shea, a member of the campus group 3 Blind Mice, which helped organize the event. At right are NEI’s Cheri Wiggs (l) and Debbie Hill, a research social worker with NIAAA and member of 3 Blind Mice.

PHOTOS: ERNIE BRANSON

teaches others who are visually impaired or blind how to use guide dogs. Although “man’s best friend” can be a valuable tool for those with vision loss, proper training and practice are crucial for mastering this skill. Most people with blindness or low vision use long white canes to navigate; only a small percentage use guide dogs, noted Lovett. He added that, although assistance is available through a variety of means, “the hardest hurdle can be asking for such help.”

Other patients shown in the documentary include Steve, a young soldier who was blinded by a roadside bomb during war; Emmet, a child born with albinism; and Bob, an older man diagnosed with optic neuritis. All benefited from learning what resources are available, vision rehabilitation, skills training and assistive technologies.

The film’s message is that there is hope; vision loss is not life-ending, productivity-ending or dream-ending.

After the film, the audience participated in Q&A with a panel that included NIH’ers with vision loss. The employees are members of 3 Blind Mice, a blind/low-vision resource sharing group that was established following the showing of *Going Blind* in 2011. The group has grown from 3 to over 70 members since its establishment. 3 Blind Mice is open to all who are interested, whether blind, low vision or sighted. For more information on the group, contact Teresa Shea at sheatm@mail.nih.gov or (301) 402-3855.



Wiggs (l) is a low-vision and rehabilitation specialist with NEI. At right, panelist Hill appears with Dr. Fredric Schroeder, research professor at San Diego State University and president of the National Federation of the Blind of Virginia.